5

10

15

ABSTRACT OF THE DISCLOSURE

A final 15-bit output code word is generated in response to every 8-bit input code word by referring to a set of encoding tables. The encoding tables contain output code words assigned to input code words, and contain state information accompanying each output code word. The state information designates an encoding table among the encoding tables which is used next to generate an output code word immediately following the output code word accompanied with the state information. When given conditions are satisfied, first and second candidate current output code words generated in response to a current input code word by referring to first and second specified ones of the encoding tables. One is selected from the first and second candidate current output code words as a final current output code word in response to DSV calculation results. Auxiliary information is superimposed on a sequence of final output code words.